

**Abstract**

*Please replace the Abstract with the following:*

A method for improving a diagnostic or surgical procedure involving combining a variable direction of view endoscopy system with image guided techniques is disclosed generally comprising acquiring volumetric scan data of a subsurface structure, such as an anatomical structure, positioning an endoscope relative to the subsurface structure, establishing the position of the endoscope relative to the subsurface structure, acquiring internal endoscope configuration data, and displaying representations of the subsurface structure and the endoscopic line of sight in their correct relative spatial relationship using the volumetric scan data, endoscope position data, and internal endoscope configuration data. The endoscope configuration data relates to the configuration of a view changing mechanism of the endoscope.